# METHOD OF IDENTIFYING AND ANALYZING
# SEMICONDUCTOR CHIP DEFECTS

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## ABSTRACT OF THE DISCLOSURE

According to a preferred aspect of this invention, locations of defects on a semiconductor wafer are found using semiconductor defect inspection instrumentation.

10    Defect composition can also be determined using inspection instrumentation. Wafer defects are represented on a wafer defect map using markings wherein locations of the markings on the map correspond to the locations of the defects on the wafer. The markings also preferably represent a defect type and/or composition. Color-coded dots, for instance, can be used to represent like defect causes or types with like colors. Graphs can be prepared to

15    display defect characteristics using distributions and skews to facilitate quick statistical analysis of the defects. In this manner, wafer defects can be analyzed quickly and efficiently based on characteristics thereof, including, for example, defect type, composition, and cause. This information can be used to help prevent future defects during mass production, thereby improving yield.

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